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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/821,676	04/09/2004	Kendall Johnston	KJOHNS.002C1	1404

7590 11/23/2005

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EXAMINER
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IZAGUIRRE, ISMAEL

ART UNIT	PAPER NUMBER
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3765

DATE MAILED: 11/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/821,676

Applicant(s)

JOHNSTON, KENDALL

Examiner

Ismael Izaguirre

Art Unit

3765

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on the amendment of 7/27/05.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 35,37-42 and 44-51 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 35,37-42 and 44-51 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 4/9/04.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

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### **DETAILED ACTION**

The examiner is appreciative of the changes made to the language of the claims. These have been duly noted and considered.

#### **Specification**

On page 4, lines 26-27, the words "The second bay is between the first and second bays" should be replaced by "The second bay is between the first and third bays."

### **CLAIMS**

#### **Summary**

Claims 35,39,42 and 47 are the independent claims under consideration in this Office action.

Claims 37,38,40,41,44-46 and 48-51 are the dependent claims under consideration in this Office action.

Concerning the language of the claims, the following is submitted for applicant's consideration:

#### **Claim Rejections - 35 U.S.C. § 112**

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

Claims 39-41 and 47-51 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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Referring to claims 39 and 47, the scope of these claims is unclear. It is unclear as to whether the structure of the feed roller is intended or if the combination of a roller and the structure of the tufting machine and its means for driving the roller is the intention.

### **Claim Rejections - 35 U.S.C. § 103**

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 35, 37-42 and 44-51 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Lane, III et al. (5,860,360).

Lane, III et al. disclose the invention substantially as claimed. Lane, III et al. teach a method of replacing a material covering a feed roller from a machine. Lane, III et al. teach a replaceable sleeve<sup>10</sup> for a roller which can be used in web or sheet handling (from column 1, lines 9-10) and where the roller is removed from the machine and typically sent out for resurfacing. After extended use, the roller is sent to an outside source where the old surface is ground down and a new surface is applied (from column 1, lines 20-22). The new surface is applied in layers (column 2, lines 14-18) and includes the use of polyurethane (column 2, line 30). After the layers are wound around the core material of the roller, the layers are cured (or heated) to cause a vulcanization

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of the layers (from column 2, 65-67 and column 3, lines 1-2) and a bonding thereof to the roller core material (see figures 1-3). Lane, III et al. teach the roller for use in handling web material, However do not suggest the web material being yarns in a tufting machine, where the tufting machine controls or actuates or drives the roller.

It would have been obvious to a person having ordinary skill in the art at the time of Applicant's invention to adapt the roller for use in a tufting machine and be driven by the tufting machine. The roller is removed from a machine (printing machine) and comprises a procedure taught as including removing the covering and providing a new vulcanized covering as found useful in a tufting machine. Providing such a roller capable of feeding yarns would be effective in feeding yarns in a tufting machine as well.

Claims 35, 37-42 and 44-51 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Andrew et al. (3,831,874) in view of Inaguma (4,624,723).

Andrew et al. disclose the invention substantially as claimed. Andrew et al. teach a method of replacing a material covering a yarn feed roller from a machine. Andrew et al. teach a replaceable sleeve 28 where the roller is removed from the machine (column 1, line 34) and a new surface is applied including the use of polyurethane (column 4, line 64). After the layer is placed on the core material 26, it is adhered to the core material. However, Andrew et al. do not suggest the covering being vulcanized to the core, or being provided in layers onto the core and where the yarns being fed are yarns in a tufting machine, where the tufting machine controls or actuates or drives the roller.

Inaguma teaches the manufacture of covering for a yarn-feeding roller. Inaguma teaches the roller including a covering including a layering including vulcanized rubber (column 4, lines 19-30) placed on the roller core material in a spiral manner (column 4, line 13). The taught vulcanization firmly secures the covering layer onto the core.

It would have been obvious to a person having ordinary skill in the art at the time of Applicant's invention to vulcanize the layered covering onto the core material. Providing such a coating would allow the covering to grip the core material in a positive manner thus providing the proper friction to the yarn being fed.

Further, it would have been obvious to a person having ordinary skill in the art at the time of Applicant's invention to adapt the roller for use in a tufting machine and be driven by the tufting machine. The roller is removed from a machine (spinning machine) and comprises a procedure taught as including removing the covering and providing a new vulcanized covering as found useful in a tufting machine. Providing such a roller capable of feeding yarns would be effective in feeding yarns in a tufting machine as well.

#### **PERTINENT CITATIONS**

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Ohkawa illustrates a roller including layering a polyurethane coating and vulcanizing the coating on the roller. Barwell et al. Illustrate a method of applying a vulcanized layer onto a feed roller. Gysin illustrates a roller including layered polyurethane, which is vulcanized on the roller. Deadman illustrates a feeding roller removed from the machine and resurfaced.

### INQUIRIES

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ismael Izaguirre whose telephone number is (571) 272-4987. The examiner can normally be reached on M-F (8:30-6:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Calvert can be reached on (571) 272-4983. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Ismael Izaguirre  
Primary Examiner  
Art Unit 3765